What we do

Barcelona Supercomputing Center-Centro Nacional de Supercomputación (BSC-CNS) is the national supercomputing centre in Spain. We specialise in high performance computing (HPC) and manage MareNostrum, one of the most powerful supercomputers in Europe, located in the Torre Girona chapel.

BSC is at the service of the international scientific community and of industry that requires HPC resources. Our multidisciplinary research team and our computational facilities –including MareNostrum– make BSC an international centre of excellence in e-Science.

Since its establishment in 2005, BSC has developed an active role in fostering HPC in Spain and Europe as an essential tool for international competitiveness in science and engineering. The centre manages the Red Española de Supercomputación (RES), and is a hosting member of the Partnership for Advanced Computing in Europe (PRACE) initiative. We actively participate in the main European HPC initiatives, in close cooperation with other European supercomputing centres.

With a total staff of more than 650 R&D experts and professionals, BSC has been successful in attracting talent, and our research focuses on four fields: Computer Sciences, Life Sciences, Earth Sciences and Computer Applications in Science and Engineering.
Most of BSC's research lines are developed within the framework of European Union research funding programmes, and the centre also does basic and applied research in collaboration with leading companies such as IBM, Microsoft, Intel, Nvidia, Repsol and Iberdrola. The quality of our investigation has been recognized by the Spanish government with the Severo Ochoa Excellence Centre grant for cutting edge Spanish science.

Mateo Valero  
Director

Josep Maria Martorell  
Associate Director

Barcelona Supercomputing Center - Centro Nacional de Supercomputación